~ Calendar ~

January
1/21, 1/22: EXPLORE test

February
2/18: EXPLORE test

March
EXPLORE scores mailed
Weekend Workshops

April
Weekend Workshops

May
Weekend Workshops

June
Summer Program Session I

July
Summer Program Session II

August
Steppingstones Workshops

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. . . and don’t forget to check out our website (www.cmites.org) and Facebook page for all the latest C-MITES information
C-MITES NEWS

C-MITES News is published by the Carnegie Mellon Institute for Talented Elementary and Secondary Students. C-MITES sponsors a talent search for 3rd-6th graders as well as summer and weekend programs for K-9th graders throughout Pennsylvania.

- Director: Dr. Ann Lupkowski Shoplik
- Program Coordinator: Pamela J. Piskurich
- Web Designer: Raymond T. Budd
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The Student Page

Have you written a short story or poem you would like to share with other C-MITES students? Do you have a favorite puzzle or brain teaser you would like our readers to try to solve? Here’s your chance! In each issue of the C-MITES NEWS, we will have a section called “The Student Page” that will be devoted exclusively to C-MITES students.

We are looking for original work by our students, including, but not limited to, poetry, short stories, mind benders, brain teasers or puzzles. To be considered for the next issue of the C-MITES NEWS, submissions must reach our office by June 1, 2012. Submissions are best sent in a Word document or in the body of an email. Emails of your work should be sent to Ray Budd at budd@andrew.cmu.edu.

Any work submitted is subject to the approval of the editor and must include contact information for the person submitting the work. We reserve the right to reject any submissions that are inappropriate for our readers.

Thanks to the ESTS Test Centers!

We would like to thank all of the schools that participated in the Elementary Student Talent Search this year by sharing information about our testing program with their students. Students in grades 3-6 took the EXPLORE test in January and February of this year at 43 test sites in 22 Pennsylvania counties. We would especially like to thank the following schools for allowing us to use their facilities for testing:

- Aquinas Academy (Greensburg)
- Blessed Sacrament School (Erie)
- Campus School of Carlow University (Pittsburgh)
- Candlebrook Elem. School (King of Prussia)
- Carnegie Mellon University (Pittsburgh)
- Cumberland Valley High School (Mechanicsburg)
- East Pike Elementary School (Indiana)
- East Union Intermediate Center (Russellton)
- Eden Christian Academy (Pittsburgh)
- The Ellis School (Pittsburgh)
- Fairfield Academy (Montoursville)
- Fort Allen Elementary School (Greensburg)
- Glenside Elementary School (Elkins Park)
- Harrisburg Area Community College (Harrisburg)
- Hillel Academy (Pittsburgh)
- Holy Child Catholic School (Bridgeville)
- Indian Valley Middle School (Harleysville)
- Linton Elementary School (Lewistown)
- Linton Middle School (Pittsburgh)
- Marshall Middle School (Wexford)
- Moon Area High School (Moon Township)
- New Castle Christian Academy (New Castle)
- Penn Christian Academy (Butler)
- Penn-Mont Academy (Hollidaysburg)
- Reading High School (Reading)
- Sacred Heart Elementary School (Pittsburgh)
- Saint Luke School (Erie)
- Saint Mary of the Assumption School (Glenshaw)
- Saint Philip School (Pittsburgh)
- Saints Peter and Paul School (Beaver)
- Scranton High School (Scranton)
- Torah Academy of Greater Philadelphia (Ardmore)
- Trinity High School (Washington)
- United Hebrew Institute (Kingston)
- Valley School of Ligonier (Ligonier)
- Westmont Hilltop Elementary School (Johnstown)
- Wexford Elementary School (Wexford)
- The Wyndcroft School (Pottstown)
- Wyoming Seminary Lower School (Forty Fort)

Professional Development for Teachers

C-MITES is continuing to offer its Professional Development series for teachers and administrators who work with gifted students. The sessions for the 2011-2012 school year will be held at Carnegie Mellon University. Check our website at www.cmites.org for a registration form. You are also welcome to provide this information to a teacher who might be interested. C-MITES awards ACT 48 credit for participation in these workshops.

It’s hard to believe it’s been 20 years! Two decades ago, in the fall of 1991, I was in the process of moving from Texas to Pittsburgh. I had been a professor at the University of North Texas, but after I met my future husband (who was working in Pittsburgh at the time), I decided it made sense to move to Western Pennsylvania. I had an $11,000 grant whose purpose it was to start a program for gifted students in Pennsylvania, and I needed a university home. I approached Dr. Ted Fenton with my ideas. At that time, Dr. Fenton was the Director of the newly-formed Center for University Outreach at Carnegie Mellon University. He thought my ideas for programs for gifted elementary students sounded good, so he agreed to help me find a space on the Carnegie Mellon campus for my project.

C-MITES officially opened its doors on January 6, 1992. Ted Fenton was right – he was able to find some space for me at Carnegie Mellon. I didn’t realize how modest that space would be! I shared an office, a telephone, and a computer with Lucille Kandrack, the secretary for the Center for University Outreach. It was crowded, to say the least, but Lucille and I got along great. I started by offering a Talent Search and a summer program. In my first Talent Search, I tested 145 children from two school districts in Pittsburgh (Baldwin Whitehall and Keystone Oaks). That June, I offered one summer class for 20 students. Alexis Kuhnle was the teacher, and she was assisted by Francy McGhie and Lara Arminas, who were recent graduates in mathematics from Chatham University.

Those were exciting times. That summer, I spent every day in class with our students and enjoyed getting to know them and their families. I can’t remember what mathematical principle Francy was trying to illustrate by dressing up as Darth Vader for one of our classes, but her arrival in that classroom and the looks of surprise on our students’ faces will always be etched in my memory. Alexis, Francy, and Lara helped devise the approach that continues to work for C-MITES: young, bright, motivated students can learn advanced concepts in mathematics (and science, technology, and language arts) when topics are presented to them in a hands-on, fun manner by teachers who are passionate about their subjects. As we developed the curriculum for our very first class in Probability and Statistics, we constantly asked ourselves what topics would be challenging to mathematically talented students and how we could present those topics to the students in ways that would be appropriate for an 8-, 9-, or 10-year-old. Students played games, completed projects, and engaged in spirited discussions about mathematical ideas. I loved watching the “aha” moments that so many of our students enjoyed during that exciting class. They saw connections in mathematics and experienced a true challenge in math class, perhaps for the first time. I couldn’t wait to do it again!

From those rather modest beginnings, C-MITES grew at a phenomenal rate. We now test about 1,000 students each January and February, provide summer programs at sites throughout Pennsylvania for approximately 500 students, and offer Weekend Workshops at Carnegie Mellon, Kennett Square, and Lower Merion for 3,000 students. Our staff has grown from one part-time employee to 5 office staff members and over 400 teachers and teaching assistants. We’re very proud of the work we do. We help to identify academically talented students, offer challenging classes for them, provide teacher training, and conduct research on talented youth.

I can’t name all the wonderful people who helped make C-MITES both a reality 20 years ago and continue to make it an excellent program today. Below, I list the major players. I am so grateful to each and every one of you for the part you played in helping me establish C-MITES and keep it going all these years:

Dr. Julian Stanley (who provided the sound theoretical base for C-MITES and other talent searches), Dr. Ted Fenton (who was willing to take a chance on an idea), Kathleen Trehy (our first office employee), Lara Arminas, Susan Assouline, Camilla Benbow, Linda Brody, Ray Budd, Amy Burkert, Paul Christiano, Jared Cohen, Nick Colangelo, Judy Cunningham, Jessica Cutler, Barbara Dunn, Jim Fulginiti, Judy Hallett, Marty Hildebrandt, Connie Hersh, Mark Kamlet, Carrie Marty, Barbara Matthews, Franny McAleeer, Robert Mehrabian, Joe Mertz, Indira Nair, Ramaa Nathan, Ilah Nourbakhsh, Paula Olszewski-Kubilius, Pam Piskurich, Elizabeth Rheinfrank, Hannah Rosen, Dan Rosenberg, Mike Sayler, Pattye Stragar, Mary Ann Swiatek, Ann Baldwin Taylor, Ellen Whitham, and Lynne Young. I would also like to thank our financial supporters, especially Mark Gelband, Bernard Meisner, The Grable Foundation, and the Robert M. Thompson Jr. Family Fund of The Pittsburgh Foundation.

Last, but not least, I must thank the C-MITES kids. You are the reason I can’t wait to get to work in the morning! Your enthusiasm about learning something new and your excitement about experiencing a challenge are the reasons I founded C-MITES.

I look forward to a whole year of celebrating the 20th anniversary of C-MITES. Watch for special activities that we have planned, such as an anniversary dinner on October 13, 2012, and a PAINT THE FENCE event sometime during the summer of 2012. Congratulations to all of us – C-MITES turns 20!
Facebook to the Rescue!

C-MITES has been working hard to provide current news and activities on our Facebook page every week. We have weekly brain games for students (and parents!), as well as news updates pertaining to academic competitions, gifted education, C-MITES alumni, and much more. However, we don’t have to be the only people posting interesting content. If you have a puzzle, an article, a photo, anything you think is worth sharing, feel free to post it on our Facebook page! We created the page to serve our community; we would love to hear from you, so let us know how we’re doing!

Thank You to Donors

The C-MITES staff is very grateful to the following donors: Mark Gelfand, The Robert M. Thompson Jr. Family Fund of the Pittsburgh Foundation, The Grable Foundation, Dr. Bernard Meisner, and the North Allegheny chapter of the Pennsylvania Association for Gifted Education (PAGE). Many C-MITES families have given gifts of $5 or more to our scholarship fund. We thank all of you!

Most of the income for C-MITES is generated from tuition families pay for our classes. However, about 15% of our income is derived from grants, gifts, and donations. The majority of these funds are used to pay for scholarships for students who cannot otherwise afford to participate in C-MITES classes. We often receive thank you notes from parents and students who have received scholarships to attend C-MITES programs. They always remind us that their student would be unable to attend C-MITES classes if not for the scholarships. One parent said, “We are so grateful! Thank you for all your hard work to make these opportunities available.”

PAGE
(Pennsylvania Association for Gifted Education)

The annual conference for the Pennsylvania Association for Gifted Education will be held May 3-4, 2012, at the Wyndham Garden Hotel in Exton, Pa. (just a mile or so from the Downingtown TP exit). Save the dates! For more information, see www.giftedPAGE.org

We encourage parents to join PAGE. This statewide advocacy organization is for parents and teachers of gifted students. PAGE offers a free Helpline for families, a network of local affiliates, an annual conference, resources, and effective advocacy. Working with state legislators and members of the Pennsylvania Department of Education, PAGE fostered the passage of Pennsylvania’s Chapter 16, Special Education for the Gifted, one of the strongest pieces of legislation for gifted education in the nation. The PAGE website, http://www.giftedPage.org/, provides many resources for parents, including parents’ guides, links to outside-of-school programs, and information about advocating for gifted students within the school system.

When the Stars Align

By Jill & Jay Clark

As parents of gifted children, we are always searching for avenues to allow our kids to expand their knowledge base, find new challenges and build relationships with like-minded peers. Unfortunately, this is not always an easy task. Our son, Ben, was grade accelerated two times and had exhausted his high school curriculum in math and physics by his sophomore year. As parents who were neither mathematicians nor scientists, we were constantly searching for activities, groups or clubs that could provide Ben the mental stimulation that he craved.

Fortunately, we located a competition math team (American Regions Math League, better known as ARML) that gathered students from our region on Sunday afternoons for practice and team building. At ARML practices, the kids began to develop friendships with others who shared their passion for math. In addition, this was the perfect forum for sharing ideas and other projects. Two of Ben’s ARML teammates were regional finalists in the Siemens Competition in 2009. They presented their project at an ARML practice and suddenly lights went on for Ben. Finding his own research project became his new quest.

And a quest it was! With limited resources at home and school, Ben was required to be rather creative. He soon realized a mentor was crucial to this process. Taking a bold step, Ben emailed the head of the local university’s astrophysics department, introduced himself and made his humble request to be mentored. To say, “the rest is history,” oversimplifies the hundreds of hours of struggles, setbacks and advances that culminated in a completed research paper, The Close Binary Fraction: A Bayesian Analysis of SDSS M Dwarf Spectra, which presented his study of binary stars.

For teachers, parents and gifted kids, the key points to undertaking this type of endeavor are two-fold. There are incredible mentors available, if you take the steps to find them. Make sure both your child and the mentor are well-suited for each other. Appreciate the time and sacrifice a mentor is willing to make for your child. The rewards, both personal and academic, are immeasurable. The second point to keep in mind is the amount of time and effort this type of venture will consume. Hundreds of hours is not an exaggeration. It will not always be stimulating. Some days will be downright frustrating; parents will need to provide the support and balance that your child needs. Ben gained the confidence needed to work through these periods and, believe it or not, the kids will find the answer, or they will turn the problem on end and find another way to solve the dilemma. These are life skills that will serve them well.

As parents, we had no idea how entering the various scientific competitions would change Ben’s life on a personal basis. At each of the competitions he attended (Siemens, Intel Science Talent Search, ISEF and, later, as a Davidson Fellow), Ben met the most incredible people. He developed friendships with like-minded kids from around the country. They all understood the sacrifices each one had made to get to this point. Watching the passion with which they shared their projects, thoughts and ideas was remarkable. Even more spectacular was the lack of competitiveness they had toward

Continued on page 6
Teacher Feature

We are pleased to feature a teacher from the Philadelphia area in our newsletter this month. Jason Benfield, who joined our program in the spring of 2009, has taught Robot Race Cars and WeDo Robotics at Lower Merion High School in Ardmore and last spring, he taught WeDo Robotics for the first time at our newest site, Patton Middle School in Kennett Square. WeDo Robotics is one of our most popular classes, due in large part to Jason’s ability to make the class fun and enjoyable for our younger students. When you walk into his classroom, you see second and third graders working together in teams, assembling their LEGO® creations and learning how to program them on the computer using LEGO® software. When asked what Jason enjoys most about the C-MITES program, he responded that it was the opportunity for students to explore subjects they might otherwise not be able to explore. He likes to see kids be engaged in a task and follow through with an idea. Jason works hard to create an environment where children feel comfortable taking risks and trying new things, one of the qualities that make Jason a truly wonderful teacher!

Jason currently teaches fourth grade in the West Chester Area school district. He has also taught kindergarten through sixth grade students. He graduated from Millersville University with a bachelor’s degree in elementary/early education and has graduate degrees from Penn State in instructional leadership/curriculum instruction with a certification in science leadership and educational psychology/gifted education from the University of Connecticut.

When Jason is not in the classroom, he enjoys running and cycling. Pictured above with Jason is Dawn Janke, who worked as a teaching assistant in WeDo Robotics at Patton Middle School this fall. This picture was taken at a 5K they ran together for the Lions Club in Skippack, Pa. Jason also enjoys traveling. He has driven the entire Route 66, visited 38 out of 50 states and traveled to Australia, Iceland, Central America and across Europe. Perhaps, the most unusual place Jason has ever stayed was the Ice Hotel, built entirely out of ice and snow in Quebec, Canada. Of all the places Jason has visited around the world, Philadelphia is still one of his favorite cities.

Teachers and C-MITES staff enjoy working with Jason because of his positive, friendly attitude and collaborative spirit. Thank you, Jason, for helping to make the Weekend Workshops in the Philadelphia area such a success! We are lucky to have such a talented and dedicated teacher in our program.

C-MITES Summer Program

One- and two-week summer programs are offered throughout Pennsylvania for academically talented students in mathematics, science, and humanities. The tentative 2012 locations include: Ardmore, Erie, Greensburg, Harleysville, Indiana, Kennett Square, Lewisburg, Monroeville, North Hills, Oakland, Pittsburgh, Pottstown, Sidman/Johnstown Area, Trafford, Washington, Warren and Wexford. C-MITES courses offer students a hands-on approach to math, science, and humanities.

C-MITES summer courses include: Advertising Edge, Amusement Park Physics, Bridge Boom, CO, Dragsters, Crime Scene Investigations, Discover Robotics, Dollars and Sense, eMissions, Explorations in Science, Forensics Science, Geo-Pardy!, Green Engineering, Harry Potter’s Science Adventure, K’NEX Geometry, Math Olympiad, Mathematics Through the Ages, Programming Using Alice, Problem Solving Using Puzzles and Games, Roaming Ancient Rome, Robotics Programming and Design, Solar System Astronomy, and Solve a Murder Mystery. For more information about the C-MITES programs, send email to cmites@cmu.edu, or call (412) 268–1629 or visit www.cmites.org. Selection is competitive.

- Commuter program weekdays full-day and half day sessions
- Some sites offer optional afternoon programs.
- June 11 – July 20, 2012 (one- and two-week sessions)
- Financial Aid Available
- Grades: completed 1-9
- Cost: $210 - $490
- Application Deadline: April 6, 2012

The Carnegie Mellon University site also offers an extended day camp called FITT camp. The camp is designed to introduce campers to activities that focus on lifetime sports/skills using university facilities. Activities may include swimming, tennis, kick boxing, circuit training, racquetball, badminton, hiking (trails), soccer, ping-pong, foosball, shuffleboard, Frisbee, track & field events and many others. The director of FITT camp is Pattye Stragar, operations manager for Fitness & Aquatics at Carnegie Mellon University. For more information about the FITT program, send email to pls@cmu.edu, or call (412) 268–1235. FITT application will be mailed separately to those students taking classes on the CMU campus.

Reminder to students taking the 2012 C-MITES EXPLORE:

You will receive EXPLORE scores at the end of March.
The Davidson Fellows Scholarship

The Davidson Fellows Scholarship awards $10,000, $25,000 and $50,000 scholarships to extraordinary young people, 18 and under, who have completed a significant piece of work.

Application categories are Mathematics, Science, Literature, Music, Technology, Philosophy and Outside the Box. Davidson Fellows are honored every year in Washington, D.C., with Congressional meetings and a special reception.

To be eligible for consideration as a Davidson Fellow, applicants must:

- Be 18 or younger as of October 10, 2012.
- Be a U.S. citizen residing in the United States, or a Permanent Resident of the United States residing in the United States, or be stationed overseas due to active U.S. military duty.
- There is no minimum age for eligibility.
- The Davidson Institute is looking for students whose projects are at or close to the college graduate level with a depth of knowledge in their particular area of study. This scholarship is not geared toward students at the novice level.
- The deadline is February 1, 2012.

For more information, visit the Davidson Institute website at www.davidsongifted.org.

C-MITES in Philadelphia

This fall C-MITES held Weekend Workshops at two locations in the Philadelphia area, Patton Middle School in Kennett Square and Lower Merion High School in Ardmore. We offered seven classes at Lower Merion High School and four classes at Patton Middle School, with 280 students in kindergarten through the seventh grade participating. We were happy to be back at Patton Middle School for our third successful session, and we would like to thank Assistant Principal Jim Fulginiti for his assistance in coordinating the classes there. The students had a blast turning liquid into delicious, edible ice cream, launching water bottle rockets into the sky, competing to become an American Math Idol, and programming their own LEGO animals to move. We were pleased to offer one of our most popular classes for younger students, WeDo Robotics, at both locations; moreover, we offered a total of three new classes at Lower Merion High School this fall: Adventures in Physics, Origami: The Art and History and Tangram Math. The classes were well received, and we hope to offer them again in the spring. Another highlight of the event at Lower Merion High School was the parent workshop entitled The Complexities of Parenting the Gifted Child, conducted by Lauren Shive, a SENG certified support group facilitator. She provided parents with a lot of useful information and tips and was able to stay after the workshop to speak with parents individually and to answer questions. We would like to thank all of the C-MITES families, teachers, and staff, especially Ramaa Nathan, the site coordinator at Lower Merion High School, for making the fall Weekend Workshops in the Philadelphia area such a success!

When the Stars Align . . .

Continued from page 4

each other; seeing them sit around a piano, laughing and singing was truly priceless.

From the start, we had no any idea where this research project on binary stars would lead Ben or our family. As you and your children continue along your own journey, do not be afraid to step off the path and try a different route. There are some fantastic guides to help you through the uncharted territory and trust us, the views are fantastic.

Editor’s note: Ben Clark won the individual prize in the 2010 Siemens Competition in Math, Science & Technology for high school students. Using individual spectra from approximately 40,000 low-mass M dwarf stars observed by the Sloan Digital Sky Survey (SDSS), Ben used sophisticated statistical and numerical simulations to demonstrate that binary stars make up 3 percent of the M dwarf star population. His mentor was Cullen Blake of the Department of Astrophysical Sciences at Princeton University.
T-shirts!  Sweatshirts!

Order your C-MITES apparel today!

Order your very own C-MITES t-shirt or sweatshirt and be the envy of all your friends! Simply fill out the order form and return it to our office with your check made payable to “Carnegie Mellon University.”

* The C-MITES tie-dye t-shirt has the “C-MITES Carnegie Mellon” logo. Cost is $17.

* The C-MITES sweatshirts are forest green. They have a hood and zipper and feature the Carnegie Mellon C-MITES logo. Cost is $27.

* Proceeds from these sales go to the C-MITES scholarship fund.

Make check payable to Carnegie Mellon University

Send to:
C-MITES
5136 Margaret Morrison St., MMP30
Carnegie Mellon University
Pittsburgh, PA 15213

Name: _______________________________
Address: _____________________________
City: __________ State: _____ Zip: ______
Telephone: ___________________________

T-shirts Quantity:
_____ youth size M  _____ adult size M
_____ youth size L  _____ adult size L
_____ adult size S  _____ adult size XL

Sweatshirts Quantity:
_____ youth size M  _____ adult size M
_____ youth size L  _____ adult size L
_____ adult size S  _____ adult size XL

Number of t-shirts X $17 =$____________
Number of sweatshirts X $27 =$_________
TOTAL ENCLOSED =$____________
(Shipping & handling included in prices)
Supporting a New Generation of C-MITES Students:
Make a Gift in Honor of the C-MITES 20th Anniversary

Dear Friend of C-MITES:

In recognition of our 20th anniversary, we have begun a campaign to raise $50,000 for scholarship funds and operating expenses.

To make a donation to C-MITES, complete and return the form to the left. You may wish to ask your employer whether they would match your contribution. Any amount would be gratefully appreciated. Please indicate whether or not you would like your name published as a donor in the next issue of our newsletter. Your contribution is tax-deductible, and you will receive a letter from Carnegie Mellon University acknowledging your gift. People making a donation of $100 or more can have their names listed on the C-MITES Summer Program t-shirt.

Your gift will have a direct impact on today’s C-MITES students. Every contribution makes a difference. Thank you!

Sincerely,

Ann Lupkowski Shoplik
C-MITES Director

Pamela J. Piskurich
Program Coordinator

Raymond T. Budd
Web Designer

Elizabeth S. Rheinfrank
C-MITES Program Assistant

Hannah Rosen
C-MITES Assistant

“I love ‘making something!’ She loved the project they made and was very excited to show it to me. She said that it was hard, but she was SO proud that she did it and did a good job!”

Parent of a student in Electricity